

Notice of Allowability

Application No.

09/757,427

Examiner

Anh Ly

Applicant(s)

FINLAY ET AL.

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 01/26/2006.
2. ☒ The allowed claim(s) is/are 1-3, 6-8, 11-13 and 16-18 (renumbered as 1-12).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. This Office Action is response to Applicant's Appeal Brief filed on 01/26/2006.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Kelvin M. Vivian (Reg. No.: 53,727) via telephone @ (650) 475-1448 on Wed. 03/15/2006.

The application has been amended as follows:

Claim 1:

1. (currently amended) A method for processing a database query on a set of data stored on a plurality of data pages in a database management system, the method comprising the steps of:

a) utilizing a query processor to call a data manager and request ~~the return a~~ result of data from the set of data;

b) allowing the data manager to locate and access query-specified data on a stabilized data page and make a determination regarding the query-specified data, the data page being stabilized to prevent concurrent updates to the data page to preserve a

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logical integrity of contents of the data page while the data manager is accessing the data page;

c) utilizing the data manager to write all the query-specified data on the stabilized data page to a buffer based on the determination while maintaining the stabilization of the data page; and

d) utilizing the query processor to retrieve the query-specified data from the buffer.

Claim 4:

4. (cancelled) (cancel claim 4)

Claim 5:

5. (cancelled) (cancel claim 5)

Claim 6:

6. (currently amended) A system for processing a database query on a set of data stored on a plurality of data pages in a database management system, the system comprising:

a data manager;

a query processor comprising means to call the data manager and request the ~~return~~ a result of data from the set of data;

means for allowing the data manager to locate and access query-specified data stabilized data page and make a determination regarding the query-specified data, the data page being stabilized to prevent concurrent updates to the data page to preserve a

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logical integrity of contents of the data page while the data manager is accessing the data page;

means for utilizing the data manager to write all the query-specified data on the stabilized data page to a buffer based on the determination while maintaining the stabilization of the data page; and

means for utilizing the query processor to retrieve the query-specified data from the buffer.

Claim 9:

9. (cancelled) (cancel claim 9)

Claim 10:

10. (cancelled) (cancel claim 10)

Claim 11:

11. (currently amended) A computer readable medium containing program instructions for processing a data query on a set of data stored on a plurality of data pages in a database management system, the program instructions comprising the steps of:

a) utilizing a query processor to call a data manager and request ~~the return a~~ result of data from the set of data;

b) allowing the data manager to locate and access query-specified data on a stabilized data page and make a determination regarding the query-specified data, the data page being stabilized to prevent concurrent updates to the data page to preserve a

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logical integrity of contents of the data page while the data manager is accessing the data page;

c) utilizing the data manager to write all the query-specified data on the stabilized data page to a buffer based on the determination while maintaining the stabilization of the data page; and

d) utilizing the query processor to retrieve the query-specified data from the buffer.

Claim 14:

14. (cancelled) (cancel claim 14)

Claim 10:

15. (cancelled) (cancel claim 15)

Claim 16:

16. (currently amended) A method for processing a database query on a set of data stored on a plurality of data pages in a database management system, the method comprising the steps of:

a) utilizing a query processor to call a data manager and request ~~the return a~~ result of data from the set of data;

b) allowing the data manager to locate query-specified data by:

b1) locating a data page containing query-specified data;

b2) stabilizing the data page; and

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b3) accessing the data page, wherein the data page is stabilized to prevent concurrent updates to the data page to preserve a logical integrity of contents of the data page while the data manager is accessing the data page;

c) utilizing the data manager to make a determination regarding the query-specified data and to write the query-specified data on the stabilized data page to a buffer based on the determination while maintaining the stabilization of the data page; and

d) utilizing the query processor to retrieve the query-specified data from the buffer.

Claim 17:

17. (currently amended) A system for processing a database query on a set of data stored on a plurality of data pages in a database management system, the system comprising:

a data manager;

a query processor comprising means to call a data manager and request ~~the~~ a result of data from the set of data;

means for allowing the data manager to locate query-specified data by:

means for locating a data page containing query-specified data;

means stabilizing the data page; and

means for accessing the data page, wherein the data page is stabilized to prevent concurrent updates to the data page to preserve a logical integrity of contents of the data page while the data manager is accessing the data page;

means for utilizing the data manager to make a determination regarding the query-specified data and to write the query-specified data on the stabilized data page to a buffer based on the determination while maintaining the stabilization of the data page; and

means for utilizing the query processor to retrieve the query-specified data from the buffer.

Claim 18:

18. (currently amended) A computer readable medium containing program instructions for processing a database query on a set of data stored on a plurality of data pages in a database management system, the program instructions comprising the steps of:

a) utilizing a query processor to call a data manager and request ~~the return a~~ result of data from the set of data;

b) allowing the data manager to locate query-specified data by:

b1) locating a data page containing query-specified data;

b2) stabilizing the data page; and

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b3) accessing the data page, wherein the data page is stabilized to prevent concurrent updates to the data page to preserve a logical integrity of contents of the data page while the data manager is accessing the data page;

c) utilizing the data manager to make a determination regarding the query-specified data and to write the query-specified data on the stabilized data page to a buffer based on the determination while maintaining the stabilization of the data page; and

d) utilizing the query processor to retrieve the query-specified data from the buffer.

3. Claims 4-5, 9-10 and 14-15 have been cancelled.

4. Claims 1-3, 6-8, 11-13 and 16-18 are allowed.

Allowable Subject Matter

5. The present application has been thoroughly reviewed. Upon searching a variety of databases, the examiner respectfully submits that claims 1-3, 6-8, 11-13 and 16-18 are allowed in light of the applicants' argument and in light of the prior arts of made record.

6. The following is an examiner's statement of reasons for allowance:

The claimed invention is directed to method, system and a computer readable medium containing program instructions for processing a database query on a set of

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data stored on a plurality of data pages in a database management system. The invention is including utilizing a query processor to call a data manager and request a result of data from the set of data; allowing the data manager to locate and access query-specified data on a stabilized data page and make a determination regarding the query-specified data.

The closest prior arts, Ponnekanti et al. (hereinafter Ponnekanti) of US Patent No.: 6,363,387 teaches utilizing a query processor to call a data page manager and request a result of data from the set of data. Ponnekanti fails to teach "to write all the query-specified data on the stabilized data page to/from a buffer." (Appeal Brief dated 01/26/2006, page 7).

These distinct features, in conjunction with all other limitations of the dependents and independent claims render claims 1-3, 6-8, 11-13 and 16-18 allowable.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

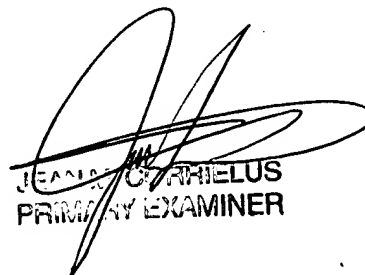
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Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ly whose telephone number is (571) 272-4039 or via E-Mail: ANH.LY@USPTO.GOV or fax to **(571) 273-4039 (Examiner's fax number)**. The examiner can normally be reached on TUESDAY – THURSDAY from 8:30 AM – 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (571) 272-4107 or **Primary Examiner Jean Corrielus (571) 272-4032**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Any response to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, or faxed to: **Central Fax Center: (571) 273-8300**

ANH LY
MAR. 17th, 2006


JEAN CORRIELUS
PRIMARY EXAMINER